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Addressing Lead-Based Paint Hazards During Renovation, Remodeling, and Rehabilitation in Federally Owned and Assisted Housing



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Introduction and Welcome



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Introduction Overview

- ◆ **Introductions**
- ◆ **Meeting facility and logistics**
- ◆ **Course objective**
- ◆ **Course manual**
- ◆ **Course agenda**



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Course Objectives

- ◆ **Minimize creation and dispersal of lead-contaminated dust and debris during**
 - Renovation and Remodeling
 - Rehabilitation
 - Maintenance
- ◆ **Protect residents, especially children, from exposure to lead-contaminated dust and debris**
 - Set-up and Containment
 - Safe Work Practices
 - Clean-up and Clearance



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This Course...

- ◆ **Is one of several courses that will enable you to perform R&R work in federally-funded housing**
- ◆ **Is not an abatement course**
- ◆ **Satisfies general lead training requirements of HUD**
 - Provides an introduction to the OSHA lead in construction standard
 - Comprehensive treatment of OSHA requirements requires additional training
- ◆ **May not satisfy state and local training requirements**



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Training Manual Overview

- ◆ **Five modules**
- ◆ **Interactive exercises**
- ◆ **Appendices**
- ◆ **Lead Paint Safety Field Guide**



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Course Agenda



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Module 1

Why Should I Be Concerned About Lead-Contaminated Dust?



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Module 1 Overview

- ◆ Exercise
- ◆ Why is lead-contaminated dust a problem?
- ◆ Health risks and effects of lead?
- ◆ What is lead-based paint?
- ◆ How many homes contain lead-based paint?
- ◆ What is the government doing about lead-based paint?
- ◆ Summary



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Why Are Dust and Debris a Problem?

- ◆ **Dust and debris can contain lead**
- ◆ **Lead-contaminated dust and debris are poisonous**
- ◆ **Small amounts of lead-contaminated dust can poison children and adults**
 - Children swallow it during ordinary play activities
 - Adults swallow or breathe it during work activities
- ◆ **Workers can bring lead-contaminated dust home and poison their families**



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Complete Module One Exercise



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Health Risks of Lead

◆ Very hazardous to children

- Reading and learning difficulties
- Behavioral problems
- Difficulty paying attention and hyperactivity
- May result in seizures, coma, and death

◆ Hazardous to pregnant women

- Damage to fetus

◆ Also hazardous to workers and other adults

- Loss of sex drive
- Physical fatigue



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Lead Poisoning

- ◆ **Lead poisoning does not always have obvious symptoms**
 - Symptoms are easily misdiagnosed, thus delaying effective treatment and increasing likelihood of permanent physical and mental damage
 - The primary way to determine lead poisoning is to take a blood lead level test.



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What Is Lead-Based Paint?

◆ Lead-based paint is

- Any paint or surface coating that contains at least 0.5% lead or 5,000 ppm by dry weight or 1.0 mg/cm²
- Some states regulate paint with different concentrations of lead

◆ Why was lead used in paint?

- Primary pigment
- Added color
- Durability and corrosion control
- Drying agent



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How Widespread is Lead in Housing?

Year House Was Built	Percent of Houses with Lead-Based Paint
Before 1940	87 percent
1940-1959	69 percent
1960-1978	24 percent
All Housing	40 percent



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What Is Being Done About Lead?

- ◆ **Lead-based paint was banned from residential use in 1978**
- ◆ **Programs affecting renovation, remodeling, and rehabilitation**
 - EPA: Contractors distribute lead pamphlet before renovation
 - HUD: Grants for Lead Hazard Control in private low-income housing; Lead Safe Housing Rule for Federally owned or assisted housing
 - HUD and EPA: Disclosure before lease or sale
 - OSHA: Worker protection standards for lead in construction
 - CDC: Testing children's blood
- ◆ **Education**
- ◆ **Local government programs and regulations**



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Title X (“Ten”) and Implementing Regulations

◆ The Residential Lead-Based Paint Hazard Reduction Act of 1992 (Title X of the Housing and Community Development Act of 1992)

◆ Goals:

- To reduce and prevent childhood lead poisoning
- To ensure that LBP hazards are integrated into government housing policies
- Encourage promising and cost-effective methods of hazard reduction
- Educate the public



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Title X - Section 402 (c)

Renovation and Remodeling

◆ Requires EPA to:

- Develop guidelines for the conduct of renovation and remodeling activities which may create a risk of exposure to dangerous levels of lead
- Study the extent to which people engaged in renovation and remodeling activities are exposed to lead, or disturb lead and create a lead-based paint hazard
- Revise lead-based paint activities regulations to apply them to renovation and remodeling activities that create a lead-based paint hazard



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EPA Training and Certification (Sections 402/404)

- ◆ Individuals performing specified lead-based paint activities must be trained in EPA or State accredited training programs and certified. EPA certifies the following disciplines:
- ◆ Inspector
 - Risk Assessor
 - Project Designer
 - Abatement Worker
 - Abatement Supervisor



Title X - Section 406(b)

◆ Lead hazard information pamphlet

- 800-424-LEAD
- www.epa.gov/lead
- www.hud.gov/offices/lead

◆ Renovation of pre-1978 housing:

Renovators, multi-family housing owners, managers receiving compensation shall provide the lead hazard control pamphlet to the owner and/or occupant prior to such activity.



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Title X - Section 406(b) (cont.)

- ◆ No more than 60 days before the start of the activity; at least 7 days if sending by certified mail
- ◆ Written acknowledgement; records retention for 3 years
- ◆ Covers work in the dwelling unit, common areas
- ◆ Exemptions: repairs of areas less than or equal to 2 ft² , emergency renovations or written documentation of no LBP via certified inspector



Title X - Section 1018

◆ The HUD/EPA Disclosure Rule requires:

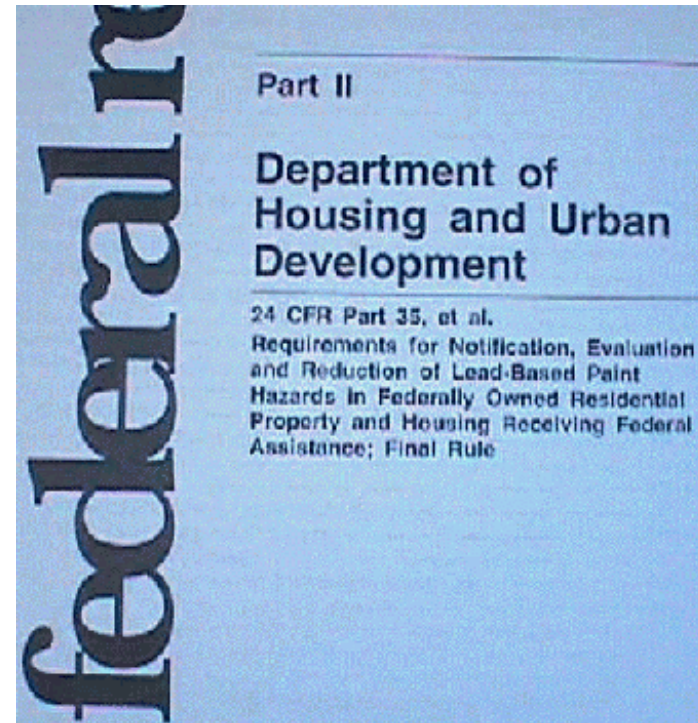
- “Protect Your Family from Lead in Your Home” pamphlet be given to people before they lease or buy pre-1978 housing
 - Renovators give this same pamphlet before starting work
- Sellers or landlords disclose information about any known lead-based paint or lead-based paint hazards before selling or renting a home.
- Buyers have up to 10 days to check for lead hazards



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HUD's Lead Safe Housing Rule

- ◆ Pre-1978 housing receiving HUD or other Federal assistance
- ◆ Pre-1978 Federally owned housing being sold
- ◆ Required activities vary by type of assistance



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HUD's Lead Safe Housing Rule: Interim Controls

- ◆ Training requirements for personnel
- ◆ Includes occupant protection and clearance
- ◆ Activities include:
 - Paint stabilization
 - Friction or impact surfaces
 - Chewable surfaces
 - Dust-lead hazard control
 - Soil-lead hazard control



HUD's Lead Safe Housing Rule: Safe Work Practices

◆ Included in:

- Ongoing LBP Maintenance
- Paint stabilization
- Rehabilitation
- Standard treatments

◆ Prohibited methods

◆ Occupant protection and worksite preparation

◆ Specialized cleaning

◆ De minimis levels (24 CFR 35.1350)



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HUD's Lead Safe Housing Rule: Clearance Examination

◆ Visual Assessment

◆ Dust sampling

- Interim Dust Lead standards
- Will be changed to EPA's standards when effective

◆ Certified, or trained and supervised personnel



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HUD's Lead Safe Housing Rule: Dust Lead Standards

HUD uses these clearance standards:

- ◆ Floors 40 $\mu\text{g}/\text{ft}^2$
- ◆ Interior window sills 250 $\mu\text{g}/\text{ft}^2$
- ◆ Window troughs 400 $\mu\text{g}/\text{ft}^2$

Need to clean carefully to meet these standards.



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Know The HUD Rule!

You may obtain a copy of the regulation from NLIC at (1-800-424-LEAD) to ensure an understanding of the requirements.



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HUD's Lead Hazard Control Grant Program

- ◆ Targeted to private homes owned or occupied by low-income families
- ◆ Since 1993, the program has:
 - Provided 177 grants totaling \$552 million to 112 State and local governments in 35 states and DC
 - Educated families on how to eliminate or reduce children's lead exposure.



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Occupational Health and Safety Administration (OSHA) Lead Regulations

- ◆ **29 CFR 1926.62 Lead in Construction**
- ◆ **29 CFR 1926.59 Hazard Communication for Construction**
- ◆ **29 CFR 1910.1200 Hazard Communication for General Industry**
- ◆ **Other Construction Safety Standards**



OSHA Lead in Construction Standard

Requirements are exposure-based and task-based. The regulation covers:

- ◆ **Demolishing or salvaging structures where lead or materials containing lead are present**
- ◆ **Removing, encapsulating or enclosing materials containing lead**



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Construction Standard: Scope

- ◆ New construction, altering, repairing, or renovating structures or substrates (or portions of them) that contain lead or materials containing lead
- ◆ Installing products containing lead
- ◆ Contamination or emergency clean-up



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Construction Standard: Scope (cont.)

- ◆ **Transporting, disposing, storing or containing lead or materials containing lead where construction activities are performed;**
- ◆ **Maintenance operations associated with the activities mentioned above**



Construction Standard: Key Concepts

- ◆ **Competent Person**
- ◆ **Exposure Assessment**
- ◆ **Action Level: 30 $\mu\text{g}/\text{m}^3$ of lead in air**
- ◆ **Permissible Exposure Limit (PEL):
50 $\mu\text{g}/\text{m}^3$ of lead in air**



Employer Requirements: Action Level and PEL

◆ At or Above the Action Level

- Training & Medical Surveillance Required

◆ Above the PEL, or for “Trigger Tasks”

If employees exposed above PEL, or do Group 1, 2 or 3 work until exposure assessment is completed, the employer must provide:

- Housekeeping
- Respiratory Protection, Protective Clothing/ Equip.
- Hygiene Facilities (showers, if feasible)
- Medical Surveillance (blood tests reviewed by doctor)
- Medical Removal (if blood lead level too high)
- Employee Information and Training



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Construction Standard: Additional Provisions

- ◆ Compliance plan
- ◆ Signs for work above the PEL
- ◆ Record keeping
- ◆ Monitoring observation



Additional OSHA Regulations

- ◆ **Respiratory Protection:
29 CFR 1910.134**
- ◆ **Personal Protective Equipment:
29 CFR 1910.132**
- ◆ **Sanitation: 29 CFR 1926.27**
- ◆ **Other construction safety standards**



Lead Information Resources

- ◆ **EPA** - <www.epa.gov/lead>
- ◆ **HUD Lead Web site** - <www.hud.gov/offices/lead>
- ◆ **OSHA** - <www.osha.gov>
- ◆ **National Lead Information Center**
 - Copies of the regulation
 - 1-800-424-LEAD
- ◆ **Lead professionals listing**
 - <www.leadlisting.org>



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Module Summary

◆ Now you know

- Why we are concerned with lead-contaminated dust
- The health risks of lead to children and adults
- The regulations that affect lead-based paint



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Module 2

Talking to Clients and Planning Work



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Module 2 Overview

◆ **At the end of this module, you will be able to answer the following questions:**

- Do I need to use lead safe work practices?
- How can I communicate information about the associated planning, cost, and time demands to the residents?
- Should the paint be tested before starting work?



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What are Your Supervisor's or Agency's Responsibilities?

- ◆ Under federal law, if disturbing more than 2 sq. ft. of painted surfaces in pre-1978 housing, you **MUST**:
 - Give residents copies of the pamphlet *Protect Your Family From Lead In Your Home* (see attachments)
 - Get confirmation that residents received the pamphlet
 - Keep confirmation records for three years
- ◆ **See *The Lead Pre-Renovation Education Rule* (40 CFR Part 745) or *Lead-Based Paint Poisoning Prevention In Certain Residential Structures* (24 CFR Part 35) for confirmation forms and guidance (see attachments)**



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Talking About Your Skills

◆ Why are you using lead-safe work practices?

- Keep the house safe
- Protect health of children and pregnant women
- Good professionalism

◆ Why are you qualified to conduct these activities?

- Completed this course
- Use lead-safe tools and supplies
- Experience with lead-safe work practices



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Discussing the Work Plan

◆ Discussing the work plan with residents

- Coordinate with program administrators and supervisors
- What lead safe work practices are planned?
- How will this work affect the residents' use of the house?
- How will you protect the residents' possessions from lead dust contamination?
- What activities will you expect the residents to perform before you begin your work?



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Why Evaluate the Job for Lead?

- ◆ Reduce your potential liability from lead dust
- ◆ Incorporate lead activities into your work schedule
- ◆ Use lead-safe work practices
- ◆ Have the right materials and equipment
- ◆ Include the cost of lead-safe work practices
- ◆ Discuss occupant protection with residents
- ◆ OSHA regulations require employers to determine if employees will be exposed



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Evaluating the Property

- ◆ **Was the residential building constructed before 1978?**
 - If yes, take proper action and use lead-safe work practices
 - If no, you do not have to worry about lead dust.
- ◆ **Has the paint been tested for lead?**
 - If yes, collect documentation of what and where



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Evaluating the Work

◆ Will this job:

- Disturb painted surfaces?
- Otherwise create or disturb lead dust?

◆ If yes, take proper precautions:

- Pre-cleaning
- Set-up
- Work practices
- Clean up
- Clearance

◆ Will this job create high levels of dust?



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Scheduling Work

◆ How will I schedule lead-safe work practices?

- Minimize hassle to residents
- Limit the size of the work area
- Minimize labor costs

◆ Take high dust jobs into account



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How Will Lead Affect the Job?

◆ How much extra time will the lead-safe work practices take?

- Talking with client
- Set-up
- Work
- Clean up

◆ What elements of the job can increase costs?

- Labor
- Supplies (see checklist in Module 4)



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Module 3

Setting Up Your Workspace to Contain Lead Dust



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Module 3 Overview

- ◆ **What is containment?**
- ◆ **High Dust Activities**
 - Hand scraping large areas
 - Demolition



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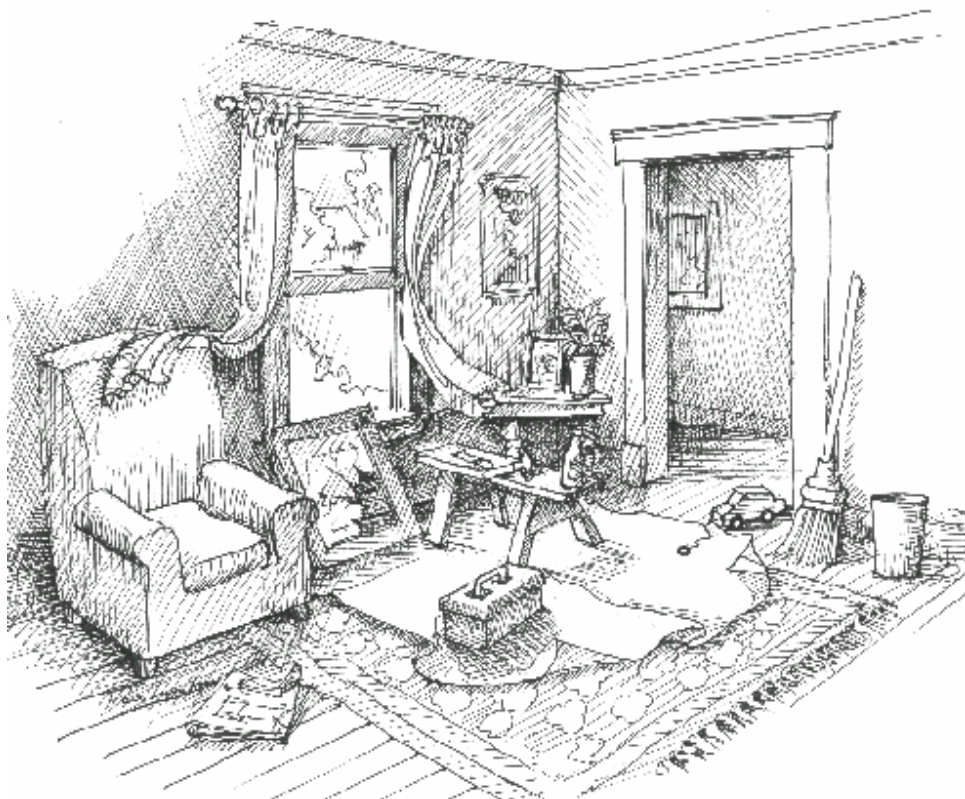
What Is Containment?

- ◆ **Keeping lead-contaminated dust in the work area**
- ◆ **Benefits of containment**
 - Protects residents and workers
 - Easier clean-up at the end of the job
 - More likely to pass clearance
- ◆ **Not required for working on areas below de minimis levels**



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Current Interior Set-Up Practices Spread Lead-Contaminated Dust



- ◆ Reusable drop cloth
- ◆ Furniture in the room
- ◆ Open doors and windows
- ◆ Broom or shop vacuum

**Do not use on jobs
where lead is present!**



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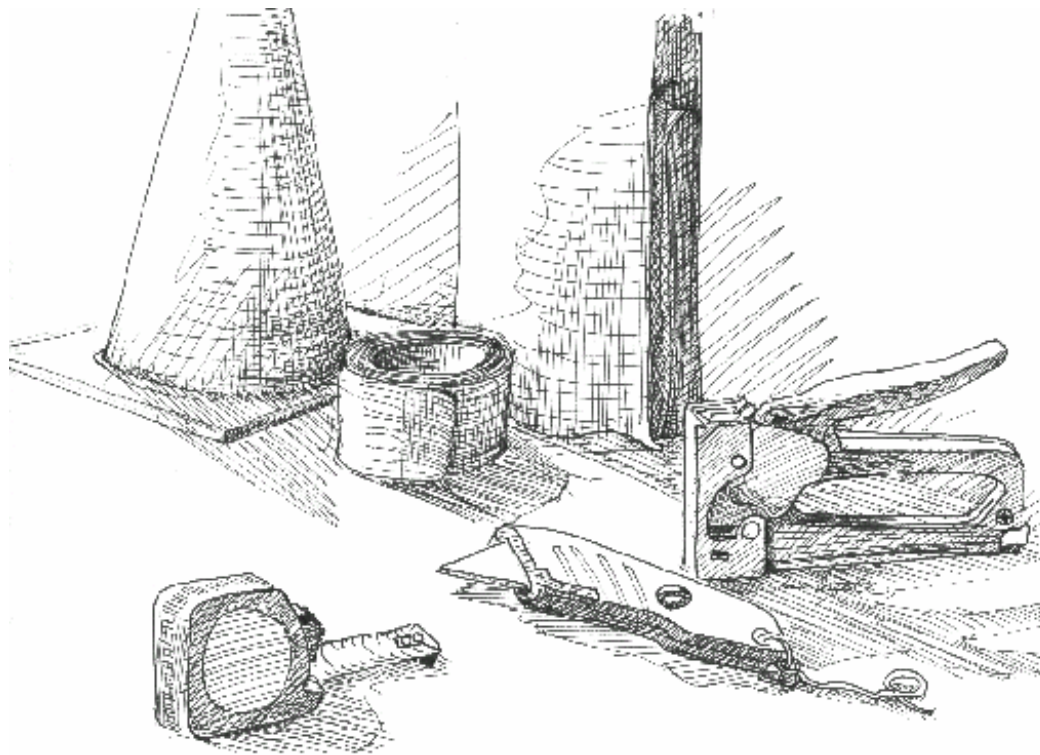
Overview of Interior Set-Up Steps

- ◆ **Step 1: Limit access**
- ◆ **Step 2: Cover belongings that cannot be moved out**
- ◆ **Step 3: Cover floors**
- ◆ **Step 4: Close windows, doors, and HVAC system**
- ◆ **Special consideration for high dust jobs**
- ◆ **Not needed for jobs below HUD's de minimis levels of areas to be disturbed**



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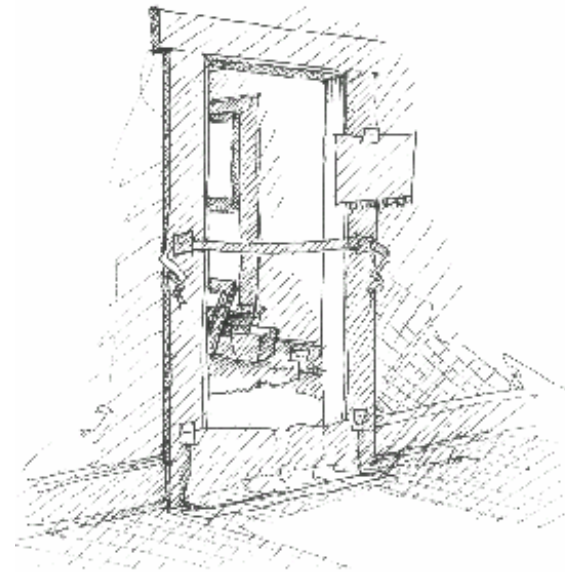
Job Set-Up Toolkit



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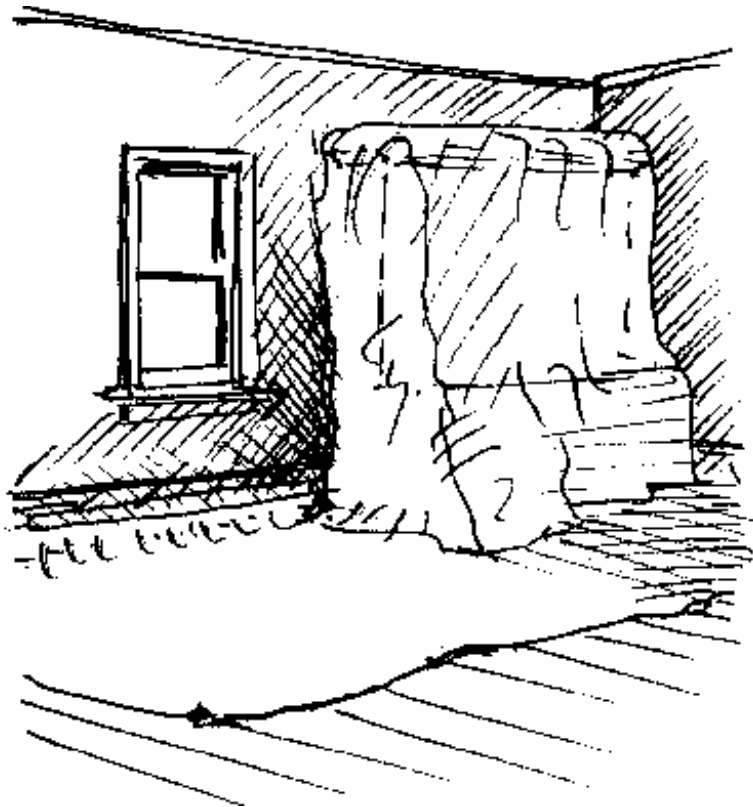
Interior Set-Up Step 1: Limit Access

- ◆ Instruct residents to stay away from work area
- ◆ Do not allow eating, drinking, or smoking in the work area
- ◆ Do not allow young children (under 6 years) or pets near work area
- ◆ Place a barrier or tape across entrances



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Interior Set-Up Step 2: Cover Belongings



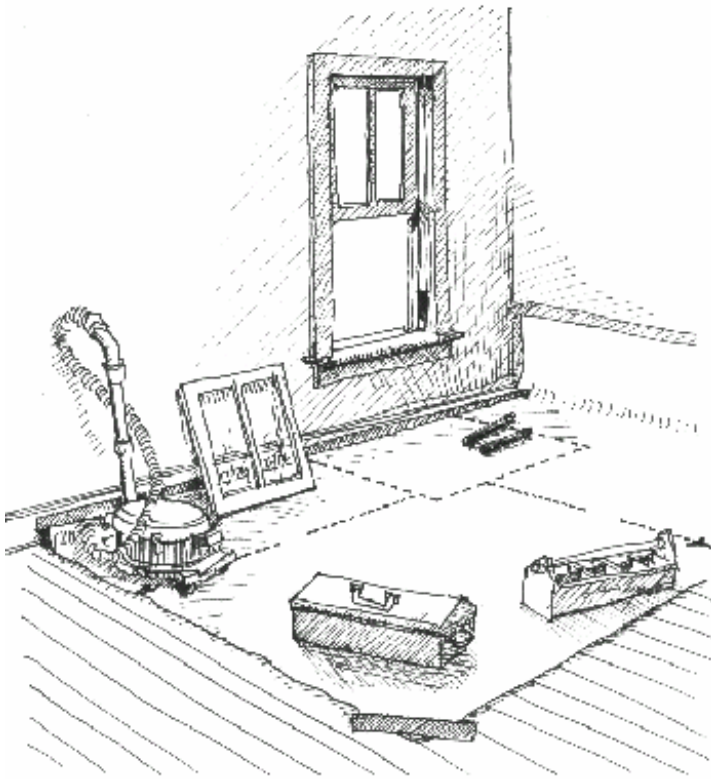
**Cover furniture and objects
in protective sheeting**

- Furniture
- Carpet
- Lamps, pictures, and other fixtures



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Interior Set-Up Step 3: Cover Floors



◆ Cover floors with protective sheeting

- At least five feet on all sides of work area
- 2nd smaller layer if using chemical strippers
- Place a tack pad at edge of protective sheeting, lay protective sheeting on frequently used walking paths to outdoors and bathrooms



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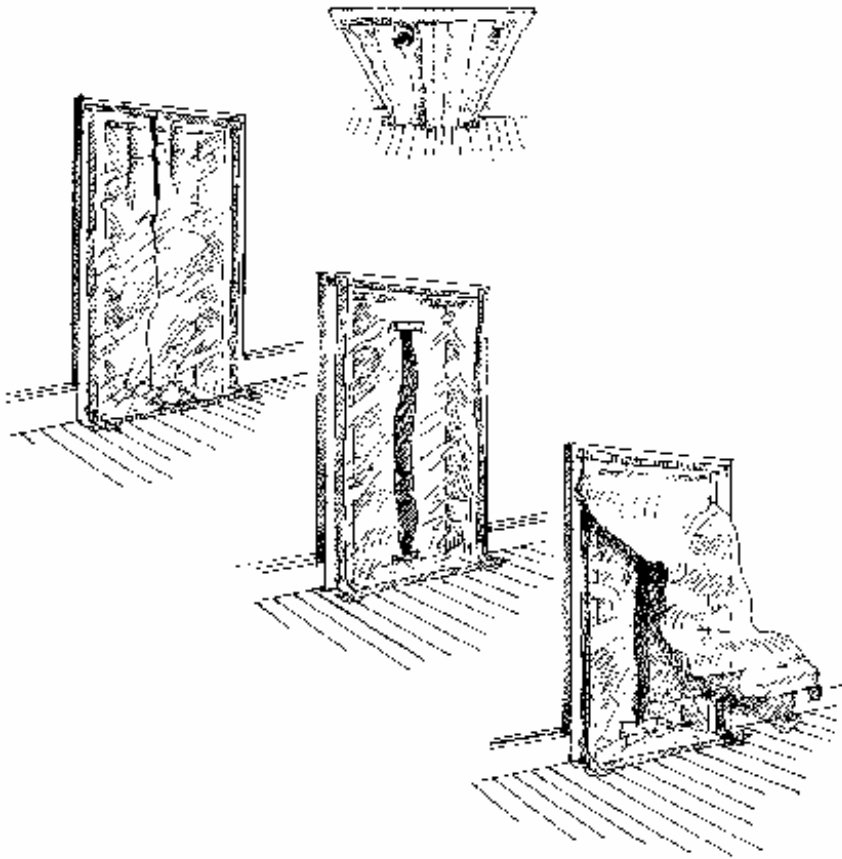
Interior Set-Up Step 4: Close Windows, Doors, HVAC

- ◆ Close and seal windows and doors
- ◆ Close and seal HVAC vents



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Special Considerations for Interior High Dust Jobs

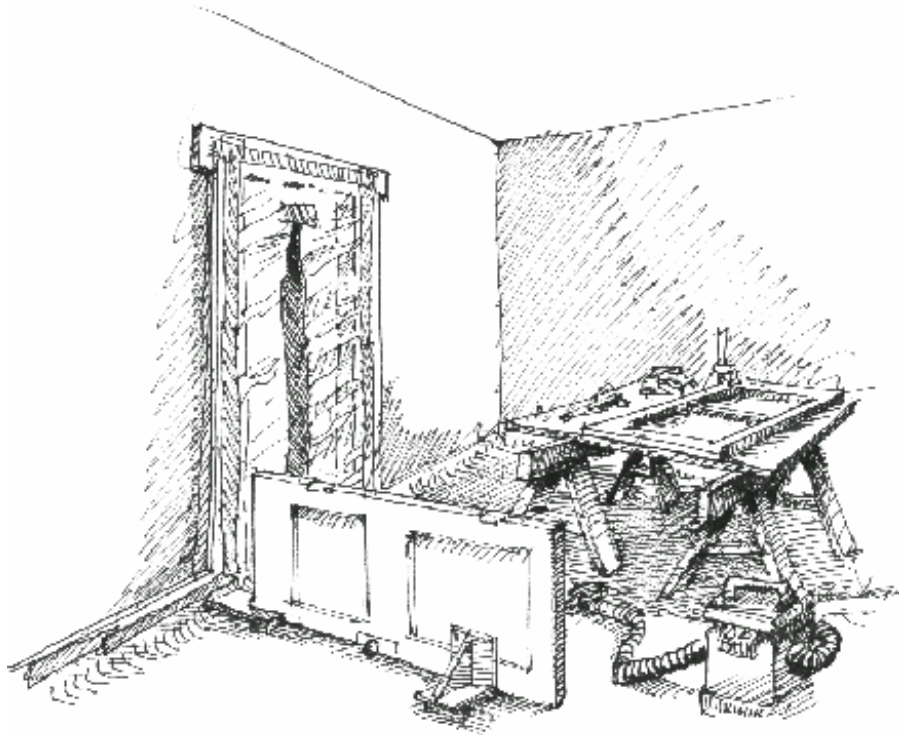


- ◆ Remove furniture, fixtures and belongings from work area
- ◆ Cover door openings with 2 layers of protective sheeting to form an “airlock”
- ◆ Close and cover HVAC vents



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Special Considerations For Interior High Dust Jobs



- ◆ For work on removable objects that create lots of dust
- ◆ Select a room that can be easily closed off
 - Follow Steps 1 through 4 for interior set-up
 - Follow the procedures for high dust jobs
- ◆ Do the work off-site



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Current Exterior Set-Up Practices Spread Lead-Contaminated Dust



- ◆ Ground uncovered
- ◆ Reusable drop cloth
- ◆ Paint chips
- ◆ No barriers
- ◆ Windows and doors open

These practices can poison children!



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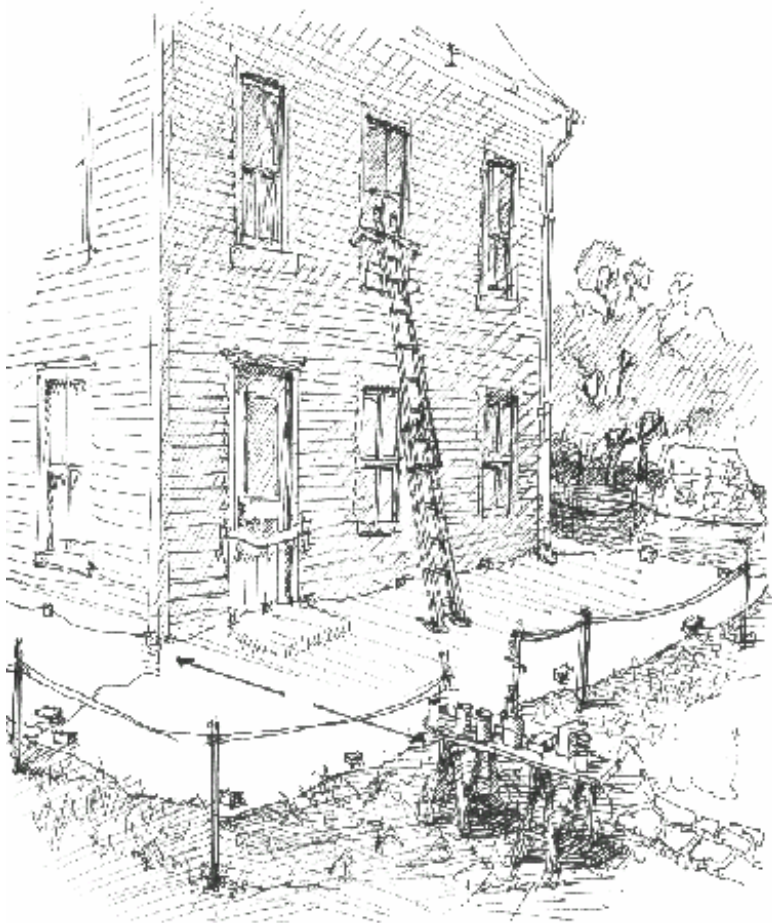
Overview of Exterior Set-up Steps

- ◆ **Step 1: Establish work area**
- ◆ **Step 2: Close windows and doors and keep closed**
- ◆ **Not needed for jobs below HUD's de minimis levels of areas to be disturbed**



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Exterior Set-Up Step 1: Establish Work Area



◆ Cover the ground with protective sheeting

- If space permits, extend at least 10 feet from work area
- Cover nearby vegetable gardens and children's play areas

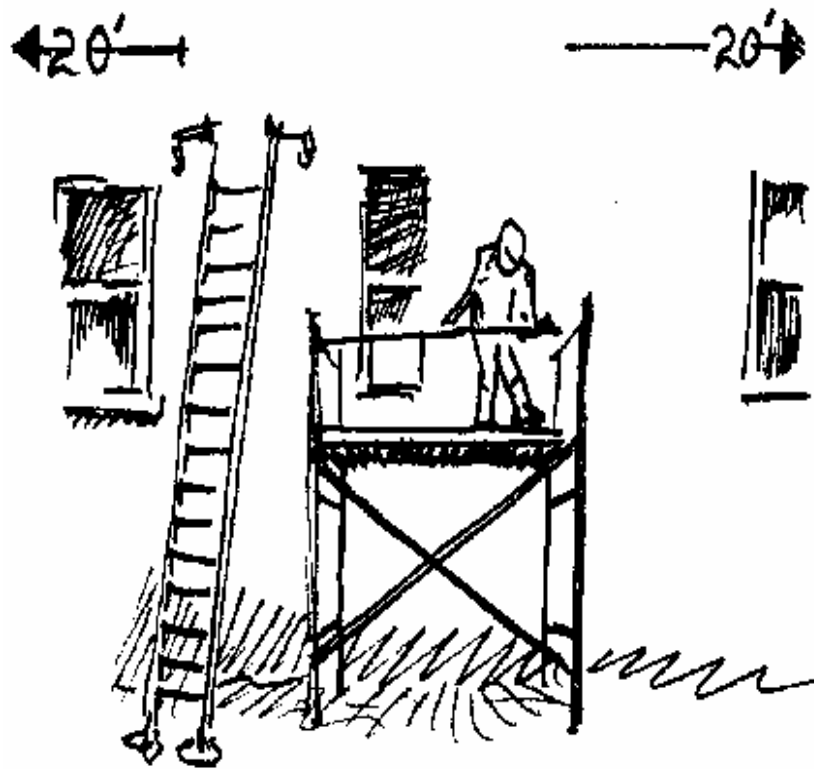
◆ Limit work area access

- Establish a 20 foot perimeter around work area if space permits



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Exterior Set-Up Step 2: Close Windows & Doors



- ◆ Close nearby doors and windows within 20 feet of the work area



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Complete Module 3 Exercises



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Module 4

Safe Work Practices



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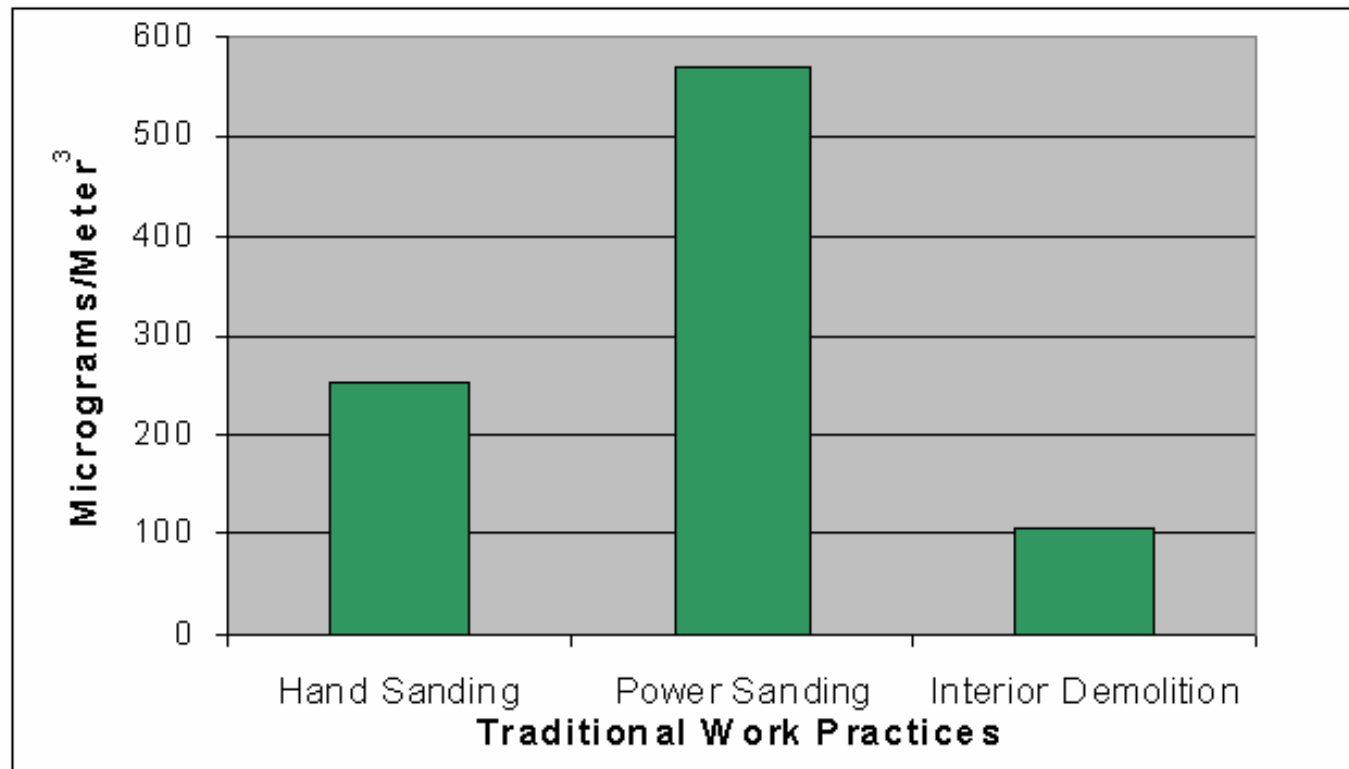
Module 4 Overview

- ◆ Prohibited Practices
- ◆ Safe work practices to perform work
- ◆ Tools and supplies you may need
- ◆ Basic steps to protect yourself
- ◆ Control the spread of dust
- ◆ Exercise
- ◆ Summary



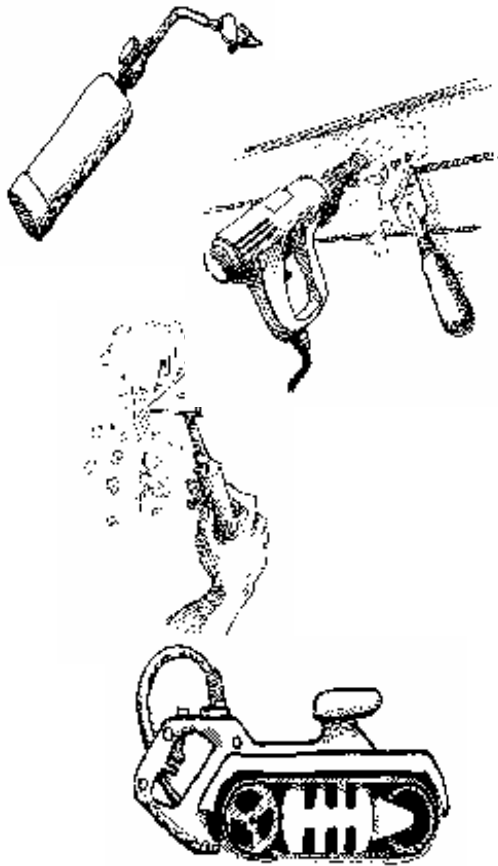
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Typical Lead Dust Creation



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Practices Prohibited by HUD in Federally Owned and Assisted Housing



- ◆ Open flame burning or torching
- ◆ Machine sanding, grinding, abrasive blasting, or sandblasting without HEPA exhaust
- ◆ Heat gun above 1,100 degrees Fahrenheit
- ◆ Extensive dry scraping and dry sanding
- ◆ Paint stripping in a poorly ventilated space using a volatile stripper that is a hazardous substance



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Safe Work Practice Alternatives to HUD's Prohibited Practices

Prohibited

- ☒ Open flame burning or torching
- ☒ Heat gun on high (1,100+ degrees F)
- ☒ Dry scraping and sanding
- ☒ Power sanding, grinding, abrasive blasting without attachment to HEPA vacuum

Safe

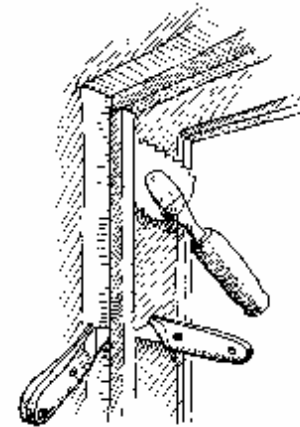
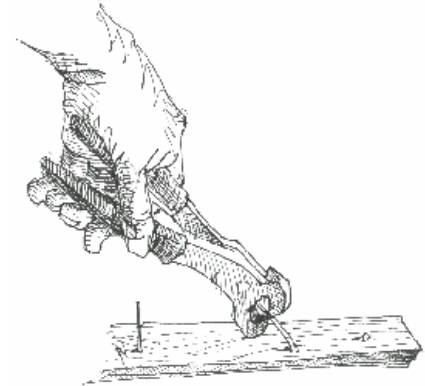
- ✓ Wet scraping and sanding, chemical stripping, heat gun below 1,100 degrees F
- ✓ Heat gun below 1,100 degrees F
- ✓ Wet scraping and sanding
- ✓ Use of power tools with attachment to HEPA vacuum



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More Safe Work Practices

- ◆ Mist before drilling and cutting (hand tools only)
- ◆ Score paint
- ◆ Minimize pounding and hammering -- pry and pull instead
- ◆ Mist surroundings



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Benefits of Safe Work Practices

- ◆ **Protect your family by not bringing dust home with you**
- ◆ **Enhance reputation for knowledge and professionalism**
- ◆ **Reduce resident exposure to lead**
- ◆ **Simplify daily and final cleanup**
- ◆ **Help protect workers from inhaling dust**
- ◆ **Protect children**



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Safe Work Practices Toolkit: Tools, Equipment, and Supplies

- ◆ Wet/dry sandpaper, sanding sponge (block)
- ◆ Mist bottle, pump sprayer
- ◆ Tape (painter's, duct, masking)
- ◆ Heavy duty plastic sheeting, such as 4-6 mil
- ◆ Chemical stripper
- ◆ Garbage bags and duct tape
- ◆ Utility knife
- ◆ Heat gun
- ◆ Vacuum with HEPA filter

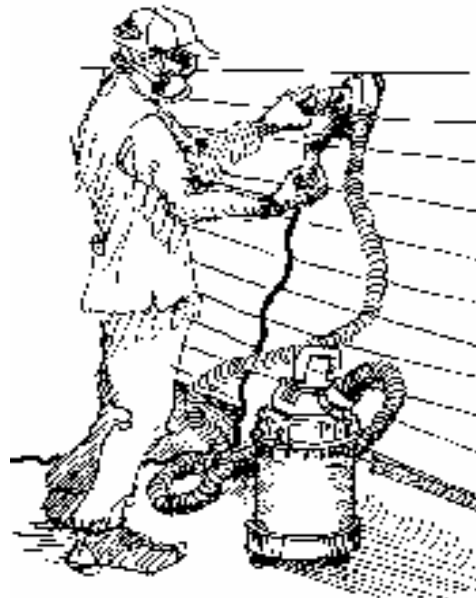


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Safe Work Practices Toolkit: HEPA-Filtered Power Tools

◆ Large jobs may require special tools

- Power sanders, grinders, planers, shavers with HEPA filter vacuum attachment
- These tools increase productivity



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Protect Yourself

◆ Workers should wear

- Painter's hat -- helps keep dust out of hair
- Disposable or washable coveralls
 - Can be reused if not ripped
 - Launder separately
- Disposable N-100-rated respirator (dusty jobs)
- Gloves (during certain tasks, *i.e. High Dust Jobs*)



◆ Wash face and hands frequently

- Helps to reduce hand-to-mouth ingestion of lead dust

◆ OSHA may require more protection



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Safe Work Practices Toolkit: Tools, Equipment, and Supplies

- ◆ Disposable hand towels
- ◆ Pre-moistened disposable wipes
- ◆ Painter's hats
- ◆ Gloves
- ◆ Coveralls
- ◆ Disposable booties
- ◆ N-100-rated disposable respirators where appropriate



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Control the Spread of Dust

◆ When you leave the work area

- Remove booties
- HEPA vacuum or wipe shoes - use tack mat
- Remove coveralls or HEPA vacuum clothes

◆ At the end of the day, don't take lead home to your family on your clothes or in your car

- HEPA vacuum clothes, shoes
- Change your clothes and dispose or place in plastic bag to wash separately from household laundry
- Wash hands, face
- Shower as soon as you get home



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Cleaning During the Job

- ◆ **A clean work site reduces the spread of dust and paint chips**
- ◆ **Clean as you work**
 - HEPA vacuum horizontal surfaces
 - Remove debris frequently
 - Remove paint chips as they are created
 - As building components are removed, wrap and dispose of them promptly
- ◆ **Clean frequently (in stages, at least daily)**



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Module 4 Exercises

◆ Objective - Exercise A

- Evaluate a scenario
- Plan Activities

◆ Objective - Exercise B

- Evaluate a scenario
- Identify potential activities that create dust
- Identify steps you can take to minimize dust, and
- Talk to clients about the potential lead dangers from the work

◆ Use checklist



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Summary

◆ Class discussion

- List key safe work practices and equipment



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Module 5

Clean-Up and Check Your Work



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Module 5 Overview

- ◆ What is effective clean-up?
- ◆ Cleaning tools
- ◆ Interior cleaning techniques
- ◆ Exterior cleaning techniques
- ◆ How to check your work and achieve clearance
- ◆ Safe disposal methods



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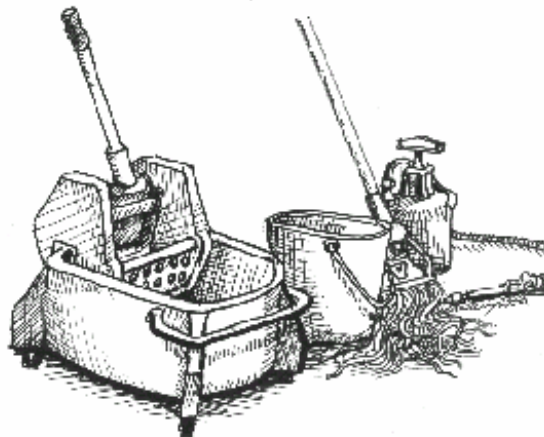
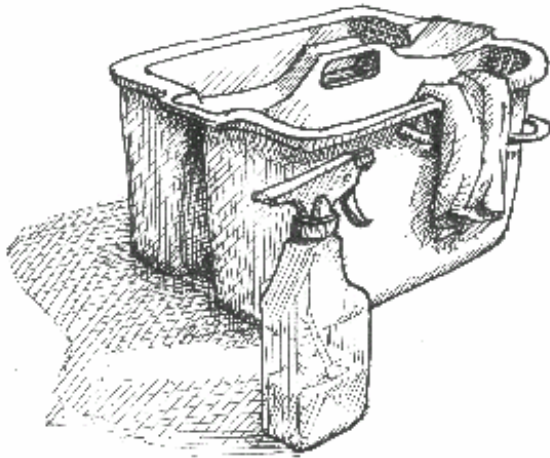
What is Effective Clean-Up?

- ◆ **Containing dust during clean-up to the area that will be cleaned**
- ◆ **Using proper cleaning techniques**
- ◆ **Cleaning all surfaces, tools and clothing**
- ◆ **Checking your work - clearance examination**
 - Visual assessment
 - Clearance testing
- ◆ **Safe and secure disposal**



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Clean-Up Toolkit



- ◆ Vacuum with HEPA filter
- ◆ Misting bottle and pump sprayer
- ◆ Mop with disposable heads
- ◆ Detergent
- ◆ Two buckets or two-sided bucket
- ◆ Disposable hand towels
- ◆ Heavy duty garbage bags
- ◆ Duct tape
- ◆ Shovel and rake



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Interior Clean-Up Techniques

- ◆ **Clean-up all paint chips and debris**
- ◆ **Pick up protective sheeting**
 - Mist sheeting before folding
 - Fold dirty side inward
 - Tape shut to seal in dirty side
- ◆ **Dispose of protective sheeting at end of job**



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Interior Clean-Up Techniques



- ◆ **HEPA Vac work area from high to low**
 - Start with walls, tops of doors, window troughs
 - HEPA Vac at least two feet beyond contained area
- ◆ **Wet clean from high to low**
 - Change cloths and rinse water often
 - Clean the floor last
- ◆ **Clearance testing at end of job**



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Interior Checking Your Work

◆ Conduct a visual inspection after cleaning

- Focus on child access areas such as floors, window troughs, window sills
- Look for paint chips, dust, debris, and deteriorated paint
- Inspect beyond work area
- Repeat clean-up steps if necessary

◆ Clearance testing at end of job ensures property is now safe for children

- Required when work is above de minimis levels in federally-assisted housing.
- If area fails clearance, re-clean and retest.



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Exterior Clean-Up Techniques

- ◆ For high-dust jobs mist area to keep dust down
- ◆ Visually inspect work area
 - Look for dust, debris, and paint chips
 - Focus on child access areas such as:
 - Window sills
 - Bare soil and ground
 - Play areas



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Exterior Clean-Up Techniques

◆ Pick up protective sheeting

- Collect and dispose of any debris or chips on sheeting
- HEPA vacuum sheeting
- Clean sheeting until it passes visual inspection
- Dispose of sheeting properly

◆ Visually inspect beyond work area



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Exterior Checking your Work

◆ Visual inspection

- Always conduct a visual inspection after any cleaning
- Focus on child access areas such as
 - Bare soil or ground
 - Window sills
 - Exterior porches
 - Play areas
- Inspect beyond work area

◆ Collect and dispose all paint chips, dust, debris, and deteriorated paint



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HUD Requirements in Federally Assisted Housing

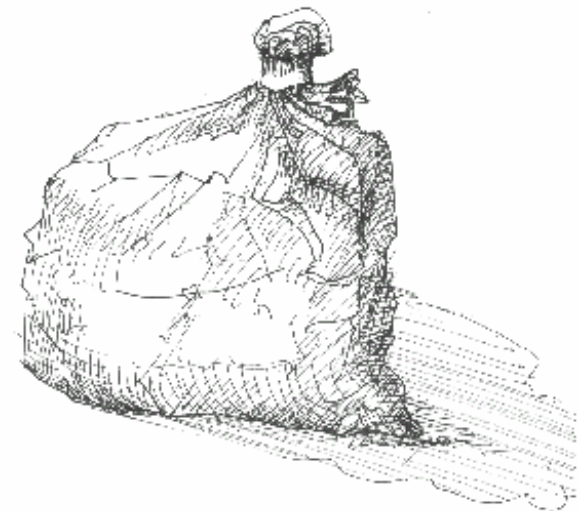
- ◆ **For work on pre-1978 housing or buildings that have not been found to be free of lead-based paint, the unit must pass clearance if the work is above the de minimis levels.**
- ◆ **A clearance examiner will:**
 - Conduct visual inspection of the work area or unit
 - Interior and exterior
 - Take dust samples from
 - Floors
 - Windows
 - Provide a written report with results
 - Be certified or have work approved by a certified inspector or risk assessor



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Disposal

- ◆ What should I do with my waste?
- ◆ At the work site
 - Place waste in heavy duty plastic bags such as 4-6 mil poly-bag
 - “Gooseneck Seal” the bag with duct tape
 - Carefully dispose of waste in accordance with state and federal regulations
 - Store waste in secure area.



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Disposal - Local and Federal Information

- ◆ **Separate residential architectural components from hazardous waste**
- ◆ **Segregate hazardous and non-hazardous waste**
- ◆ **Minimize hazardous waste**
- ◆ **Always check State regulations!**



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Keep In Mind

- ◆ **Schedule time to clean thoroughly at the end of each day**
- ◆ **Assign responsibilities to specific personnel**
- ◆ **Create and maintain a checklist for cleaning procedures**
- ◆ **Always maintain sufficient cleaning and disposal supplies**
- ◆ **Achieve Clearance**



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Appendix 10

Supervisory and Business Issues



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Lesson Overview

- ◆ **Key supervisor responsibilities**
- ◆ **Benefits of performing work in a lead-safe manner**



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Key Supervisor Responsibilities

- ◆ Stay informed
- ◆ Ensure job performance
- ◆ Manage liability
- ◆ Manage works
- ◆ Maintain records



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Stay Informed

- ◆ State and local regulations pertaining to LBP
- ◆ OSHA requirements for worker safety
- ◆ Waste management and disposal requirements



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Job Performance

- ◆ Skill building
- ◆ Tool kits
- ◆ Planning
- ◆ Client education



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Tool Kits

- ◆ Setup
- ◆ PPE
- ◆ Safe Work Practices
- ◆ Clean-Up



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Liability Management

◆ Four methods to limit liability

- Achieve and document clearance
- Contract modifications
- Quality control
- Insurance

◆ Failure to comply with applicable regulations could expose contractors to liability

◆ Voluntary work practices presented in this training may create a new legal standard



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Scope of Work for Proposal

- ◆ Lead Paint Safety Field Guide
- ◆ Model Specifications
- ◆ HUD Guidelines
- ◆ Associations



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Insurance

◆ General liability insurance

- Certain state and local laws may require it
- Most policies contain a pollution exclusion clause

◆ Pollution liability insurance

◆ Errors and omissions insurance

- Typically for consultants, risk assessors, inspectors



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Work Crew Management

- ◆ **Personal protection equipment**
- ◆ **Match work crew skills to job requirements**
 - Lead and non-lead work environments
- ◆ **Daily oversight**
 - Daily quality control
 - Daily checking on cleaning



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Records Maintenance

◆ Pamphlet

- Record of providing *Protect Your Family From Lead In Your Home* pamphlet required under the 406(b) rule

◆ Recommend review with client the punch list of work completed



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Benefits of Using LBP Safe Practices

- ◆ **Reduced liability exposure**
- ◆ **Increased employee morale**
 - Safer work sites
 - Better worker health
- ◆ **Marketing benefit**
 - Differentiation from other contractors
 - Generate positive word-of-mouth and publicity
 - Market as higher quality work
 - Provide clients with peace of mind



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